

(6 pages)

Reg. No. :

Code No. : 20873 E Sub. Code : ESZO 11

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2024

First Semester

Zoology

Skill Enhancement Course I — ORNAMENTAL FISH
FARMING AND MANAGEMENT

(For those who joined in July 2023 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. The common name of *Poecilia reticulata* is
 - (a) Angel fish
 - (b) Siamese fighter fish
 - (c) Goldfish
 - (d) Guppy
2. The size of the fry is
 - (a) 1-2 cm
 - (b) 5-6 cm
 - (c) 1-3 cm
 - (d) 3-6 cm

8. Fish is dipped for 1-2 min, in 500 ppm copper sulphate for treatment of

- (a) The prevent Tail rot or fin rot
- (b) Dropsy
- (c) IHN
- (d) IPN

9. _____ can be used as long term bath to prevent pathogen attack on fishes in both freshwater and saltwater systems.

- (a) Calcium permanganate
- (b) Potassium permanganate
- (c) Potassium chloride
- (d) Potassium nitrate

10. _____ is a leading country in export of ornamental fishes.

- (a) USA
- (b) UK
- (c) Singapore
- (d) India

3. Which among the following lays adhesive eggs?
 - (a) *Danio sp.*
 - (b) *Carassius sp.*
 - (c) *Aplocheilus sp.*
 - (d) *Rasbora sp.*
4. During the breeding of live bearers, the eggs are situated in
 - (a) Ovaries
 - (b) Testis
 - (c) Cloacal aperture
 - (d) The egg duct
5. _____ method is commonly used for propagating aquarium plants.
 - (a) Division
 - (b) Spores
 - (c) Cuttings
 - (d) Seeds
6. _____ is a locally available live feed option for fishes.
 - (a) Brine shrimp
 - (b) Frozen bloodworms
 - (c) Dried tubifex worms
 - (d) Pellets
7. What is the optimal free carbon dioxide concentration for an aquarium?
 - (a) <15 ppm
 - (b) <30 ppm
 - (c) 25 ppm
 - (d) 30 ppm

Page 2 Code No. : 20873 E

PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing either (a) or (b).
Each answer should not exceed 250 words.

11. (a) Mention the scope of ornamental fish culture.

Or

- (b) List out the steps involved in the identification of commercially important ornamental fishes.

12. (a) Write a note on breeding management of egg layers.

Or

- (b) Comment on biology of live bearers.

13. (a) Write a note on aquarium plants and their propagation.

Or

- (b) What is live feed culture? Explain.

14. (a) Enlist the accessories necessary for the construction of aquarium.

Or

- (b) How do you design an Aquarium? Explain.

Page 3 Code No. : 20873 E

Page 4 Code No. : 20873 E

[P.T.O.]

15. (a) Comment on packing methods used in ornamental fish farming.

Or

(b) What are the strategies followed in marketing of ornamental fishes?

PART C — (5 × 8 = 40 marks)

Answer ALL questions choosing either (a) or (b).
Each answer should not exceed 600 words.

16. (a) Elucidate the identification of commercially important indigenous varieties of ornamental fishes.

Or

(b) Discuss in detail about exotic varieties of ornamental fishes.

17. (a) Write a note on :

(i) Breeding

(ii) Hatchery

(iii) Nursery management of egg layers.

Or

(b) Elaborate about the biology of live bearers and its management.

Page 5 Code No. : 20873 E

18. (a) Explain in detail about food and feeding in ornamental fishes.

Or

(b) Differentiate formulated feed and live feed with its advantages and disadvantages.

19. (a) Write an essay on any three ornamental fish diseases, prevention and treatment methods.

Or

(b) Summarize the steps involved in maintenance of aquarium and water quality management.

20. (a) Transport and quarantine methods are important for trade and export – Justify.

Or

(b) Write a note on :

(i) Trade regulation

(ii) Domestic export potential

(iii) Global export potential.

Page 6 Code No. : 20873 E